Acute peritonitis due to introital stenosis and perforation of a bowel neovagina in a transsexual

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***Background*: Stenosis of the neovagina is a late postoperative complication of male-to-female sex reassignment surgery when patients do not have frequent sexual intercourse or do not perform vaginal dilation.**

***Case*: A 39-year-old male-to-female transsexual who had sex reassignment surgery, in which a segment of sigmoid colon was used for neovagina construction, developed total introital stenosis and subsequent peritonitis caused by bowel perforation of the colon conduit.**

***Conclusion*: To avoid stenosis of the neovagina, an inflatable silicon vaginal stent should be used all day for 30 days, then for 3 months overnight or until sexual function is regular. (Obstet Gynecol 2001;97:828–9. © 2001 by The American College of Obstetricians and Gynecologists.)**

In a male-to-female transsexual, a neovagina can be constructed by inversion of the penile skin,[1] by a combination of skin flaps from the penis and scrotum,[2] or by using a segment of rectosigmoid.[3] A male-to-female transsexual who had sex reassignment surgery in which a segment of sigmoid colon was used for neovaginal construction developed total introital stenosis and presented with peritonitis caused by perforation of the colon conduit.

Case

A 39-year-old Columbian man had sex reassignment surgery in December 1998 in Columbia in which a segment of sigmoid colon was used for neovagina construction. After surgery, the patient used a vaginal stent for 4 weeks. Two months after removal of the stent, the patient developed total introital stenosis of the neovagina. In April 1999, she presented to us in Italy with a 2-day history of colicky abdominal pain, abdominal distension, and vomiting. Preoperative laboratory examination and abdominal films were normal. Laparoscopy found a large amount of fetid mucus in the abdominal cavity. Laparotomy was done and blowout was found of a mucocele originating at the posterior wall of the isolated colonic segment. The isolated colonic segment was distended and 40 cm in length. The perforation was closed with slow absorbable 3-0 suture.

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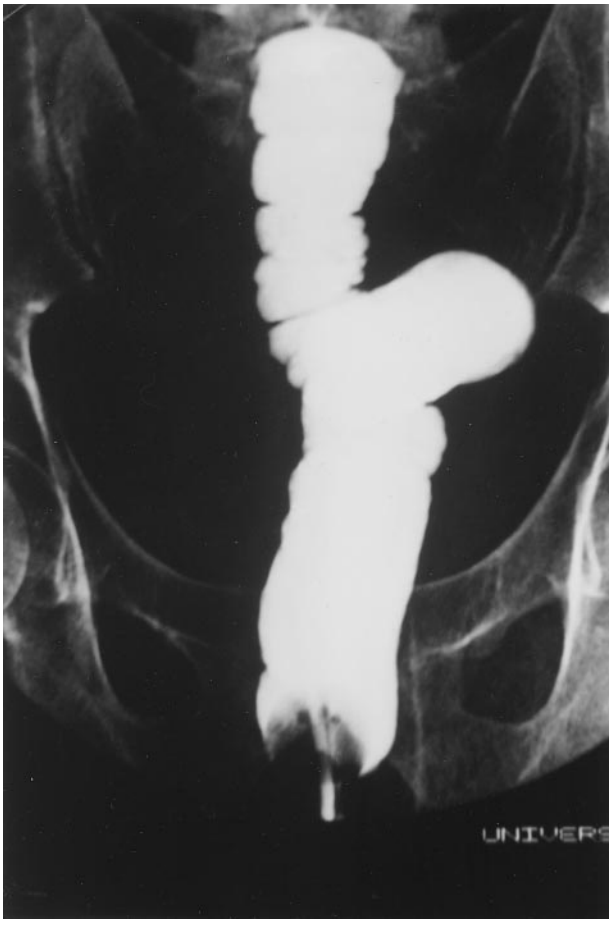

Figure 1. Vaginography showing a more-than-40-cm-long intestinal vagina.

Two months later, she presented with recurrent total stenosis of the neovaginal introitus. Preoperative introital dilatation with semirigid catheters, 8 to 18 F, and daily irrigations with hydrosaline solution were done. Vaginography showed an intestinal vagina more than 40 cm in length (Figure 1). The introital stenosis was corrected with four perineal V flaps. An incision was extended inwardly through the stenotic portion of the vagina, the perineal flaps raised, with care taken to maintain full thickness, and after removal of abundant scar tissue, a Z-plasty was done between the stenotic introitus and the sigmoid neovagina. An inflatable silicon stent was left in the reconstructed vagina for 30 days. There were no postoperative complications and the patient was discharged on the fifth postoperative day, and had satisfactory coital function 7 months after surgery.

Comment

Complications of sex reassignment surgery are well known. Early postoperative complications are hemorrhage; hematoma; infection; rectovaginal, perineal, or urethrovaginal fistula; and partial necrosis of the flaps,

whereas late postoperative complications are stenosis of the vagina; prolapse of scrotal flaps; and lengthened urethral stump.[4,5] If patients do not have frequent sexual intercourse or do not use a vaginal stent, stenosis of the vagina can develop.[6] Our patients are instructed to use an inflatable silicon vaginal stent all day for 30 days, then for 3 months overnight or until sexual function is regular.

With an intestinal neovagina, if the isolated bowel segment is kept relatively short and the vaginal introitus is patent, mucus production is not a problem.[7] In our case, early removal of the vaginal stent might have led to total stenosis of the vaginal introitus. Mucus production within the neovaginal continued and the introital stenosis led to stasis of the mucus, which ultimately perforated the neovagina and caused acute peritonitis. As to why the bowel neovagina was so long, we believe it was designed to be used as a drug smuggling depository.

Our case suggests that when creating an intestinal neovagina, it is advisable to avoid surgical techniques that might cause introital stenosis, utilize a relatively short bowel segment, and consistently use a vaginal stent postoperatively.

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Received July 26, 2000.
Received in revised form October 16, 2000.
Accepted November 9, 2000.

Postmenarchal development of chylous ascites in acrocephalosyndactyly with congenital lymphatic dysplasia

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***Background*: Acrocephalosyndactyly is a syndrome characterized by congenital malformation of the skull with craniosynostosis, midface hypoplasia, and symmetrical webbed fusion of the fingers and toes. We describe a possible pathophysiologic mechanism for chylous ascites that developed several months after menarche in a woman with acrocephalosyndactyly and congenital lymphatic dysplasia.**

***Case*: A 25-year-old nulligravid woman with acrocephalosyndactyly, at 18 months after menarche, developed persistent abdominal distension at age 18 years. Laparoscopy at age 25 years revealed chylous ascites with marked chronic peritoneal inflammation, and lymphatic dysplasia with lymphocysts. With hormone manipulation, the chylous ascites fluctuated.**

***Conclusion*: After menarche in a woman with acrocephalosyndactyly, ovarian steroid hormones might have increased lymph production and hydrostatic pressure, causing rupture of congenitally dysplastic lymph vessels resulting in chylous ascites. (Obstet Gynecol 2001;97:829–31. © 2001 by The American College of Obstetricians and Gynecologists.)**

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In 1906, Eugene Apert[1] described acrocephalosyndactyly, a syndrome characterized by congenital malformation of the skull with craniosynostosis, midface hypo-

0029-7844/01/$20.00
PII S0029-7844(00)01162-5